MINI OFFICE....

- ★ **Word Processor**
- ★ **Database**
- ★ **Spreadsheet**
- ★ **Graphics**

Side 1	*Side 2*
LOAD	**LOAD**
"WORD"	**"SPREAD"**
for Word	for Spreadsheet.
Processor.	**LOAD**
LOAD	**"GRAPHICS"**
"DBASE"''	for Graphics
for Database.	

WORD PROCESSOR

A WORD processor is ideal for writing letters and reports instead of using a typewriter or pen and paper. When you make a typing error or change your mind, the word processor enables you to edit the text with ease. No longer will you need to use unsightly crossing out, rubbers or Tippex – and find you need to start again because it's such a mess after all the changes.

To load and run the word processor simply type:

LOAD "WORD"

and press Return.

When loading has been completed, the various options available are displayed.

An option is chosen by pressing the appropriate function key as indicated. Pressing RUN/STOP at any time will bring you back to the display of options.

Getting started

Suppose you want to type a short letter to your friend about your recent holiday. Begin by pressing *f1*.

In the middle of the screen you will see START and END displayed. These mark the beginning and the end of the letter. However since you haven't written anything yet there is

no text in between.

At the top of the screen is displayed the time that has elapsed since you started using the program, the number of words you have entered so far, and the number of characters you can key in before the computer's memory is full.

Start typing your letter exactly as in this sample, mistakes and all:

i have just had a supper
holiday in blackpool.

If you didn't manage to type that in successfully, press *f8* and then in answer to the question *"Are you sure?"* press **Y**. Then start again by pressing *f1*. If you still have difficulty, read on.

Now to start correcting the letter.

By using the cursor control keys the square cursor can be made to move about the text to any position you want. First correct the word *blackpool* to read *Blackpool* with a capital *B* by moving the cursor onto the *l* after the *b*. Now press DEL and the *b* is rubbed out. Next press B while holding down the Shift key and the word *Blackpool* should now be correct. The first word *i* can be changed to *I* in a similar way. (Note that upper and lower case letters and symbols are obtained in the normal way with the Shift key.)

Now correct *supper* to read *super* by moving the cursor onto the *e* and pressing DEL.

All letters should start with *Dear Eric*, or something similar. To insert this into the letter, move the cursor to the start of the first line and type:

Dear Eric,

followed by Return.

Similarly, a letter would end with *Yours sincerely, Carol.* So move the cursor to the end of the last line and press Return. If you want a blank line before *Yours sincerely* press Return again. Then type:

Yours sincerely,
(Return Return)
Carol

You should now have a complete and perfectly laid out short letter. If you want to add to it, change it or put more spaces or blank lines in, just move the cursor to the appropriate place and type what you want to say.

While you have been typing you may have noticed that the figures below WORDS and FREE displayed at the top of the screen have changed. These indicate how many words are

contained in your letter and how much space you have left if you wish to extend your letter.

So far you have only been using the normal sized character mode. Pressing *f1* will now show your letter in large letter editing mode (*f1* switches between normal and large letter modes). You could have written your letter in this mode if you had preferred.

If you now press *f2* your typing speed in words per minute is displayed at the top of the screen for a few seconds. (Note that this does not happen if pressed while not in an editing mode.)

Having written your letter, you might like to save it for later — or even to send it to Eric on tape. If you now press *f6* you will be asked to enter the file name. Make sure you have a tape with nothing useful on it or a correctly formatted disc and enter:

letter1 (Return)

You will then be asked whether your want to save it on tape or disc. Press **T** or **D** accordingly and your letter to Eric is saved as a file called "letter1". Note that the file name must start with a non-numeric character.

Suppose you now want to write the same letter to Chris. Press *f1* so that Eric's letter is

shown. Then edit the letter by replacing the word *Eric* with the word *Chris*. You have now written two letters that are almost the same with the minimum of effort. The second letter can now be saved in the same way, using a different file name.

To start a completely new file, press *f8* followed by **Y**. Pressing *f1* shows that there is no file there any more.

To load Eric's letter back in, press *f7* followed by **Y** to the first question. Then type:

letter1 (Return)

making sure the correct tape or disc is ready. Pressing *f1* will show that Eric's letter is back.

If you have a printer you might like to print the letter so that you can post it to Eric. To do this press *f3*.

If you reply to all the questions like this:

20 (Return)
10 (Return)
N
N
Y or N
N

the letter should be printed out. Pressing space

then takes you back to the options.

A more detailed description of the various options and functions follows.

Options

RUN/ STOP
This terminates the present option and returns to the option display page.

f1
This selects the editing mode from the menu, and switches between normal and double size text if pressed whilst in that mode.

f2
This displays the typing speed in words per minute for the present text file. This option only operates when in an editing mode. When a file is loaded or saved, this information is loaded or saved with it. This makes it possible for typing speeds to be correctly shown for a particular file, even though it may have been started and saved the previous day. Typing speed is calculated from the number of words in the file and the total time spent in an editing mode and not the time spent at the keyboard.

f3
This selects the printer option. You have the choice of selecting the maximum number of characters per

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line (any number from five to 80), as well as the width of the left margin in character widths and the size of the characters both vertically and horizontally. The double size characters may cause a peculiar output to the printer unless it is a Commodore MPS 801 or MPS 802. The maximum number of characters per line depends on the character size and the margin chosen. If Paged mode is chosen then printing should start with the print head just below the perforation. Each new sheet of paper will then have a page number printed at the top and printing will not occur across the perforation.

Paged mode will also take into account the end of page markers. When one of these is encountered, the next line is printed on the next sheet. Paged mode is designed to work with a form length of 11 inches. If paged mode is not selected, then paged end markers are ignored and printing will occur across the perforations unless your printer has an automatic skip over perforation built in.

The preview of text enables the printing format chosen to be viewed

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f4
before actual printing. To stop the preview scrolling, press any key, then press a key again to continue.

This option enables a section of text to be copied to the cursor position. To use, first position the cursor at the destination point for the copied text. Then press f4. Next move the cursor to the start of the text to be copied and press C. The screen display will then revert to the situation that existed when f4 was pressed, except that the top line of the screen will show the line of text being copied. Each press of the C key copies another character. The left and right cursor keys move the line of text being copied, rather than the cursor. The up and down cursor keys are not used. To exit this copy mode press f4 again.

f5
This enables the TAB key (CTRL I) to be set. There are four tab values, which must be chosen in ascending order. The maximum tab value is 40. If less than four tab values are required, give the last few the same value.

The effect of CTRL I when in the editing mode is to move the cursor to the column position indicated by the

next tab value, which it does by inserting spaces. The next tab value is the lowest tab value that is greater than or equal to the present cursor position. For example, suppose the tab values are 5, 10, 15 and 19, and the cursor is at present at the beginning of the line in Column 0. If CTRL I is pressed at this stage, the effect would be the same as pressing SPACE five times, so moving the cursor to Column 5. If xyz is now typed, so that the cursor is now in Column 8, and CTRL I is again pressed, the next tab value is 10. So the effect is that SPACE has been pressed twice to move the cursor to Column 10. If abcdefg is now typed, taking the cursor to Column 17, and CTRL I is pressed again, since the cursor is beyond the third tab value this value is ignored and the fourth tab value of 19 is used. So effectively the cursor moves to Column 19 by the insertion of two spaces. Pressing CTRL I key when the cursor is beyond the largest tab value has no effect. A tab value larger than the number of characters per line is also ignored.

f6
This enables the text at present in

memory to be saved. Simply enter the name of the file followed by Return. The file name must always begin with a non-numeric character.
(See note on RUN/STOP below)

f7 This enables a file to be loaded from tape. Simply press **Y** if you are sure you do not want the program at present in memory, and enter the file name followed by Return. The file already in memory will be destroyed by loading in another file, so be sure this has been saved if you wish to keep it. If "Bad file" is displayed after loading it means that either the file has been corrupted or it wasn't a text file. (Pressing RUN/STOP while loading or saving will cause the operation to abort and disc or tape errors may appear.)

f8 This simply erases the file in memory. Only press **Y** if you are sure you do not want the present file in memory.

CTRL P This inserts an end of page marker at the cursor point. These markers are used in the paged mode when printing.

CTRL 1 Allows you to change the border colour.

CTRL 2 Allows your to change the background colour.

CTRL 3 Allows you to change the ink colour.

CTRL 4 Allows you to change the cursor colour.

CLR Returns to the top of the current file.

Further advice

It is always a good idea to save sections of long text at regular intervals. By doing this, you can ensure most of the text has been safely saved should you experience a power failure or similar mishap.

If the file becomes corrupted after aborting during loading or saving, clear the memory with **f8** and start again.

DATABASE

A DATABASE is an ideal way of storing information such as names, addresses, telephone numbers and ages. Each of these four pieces of information is called a field. Together they make a record. So a database is really like an electronic filing cabinet containing a lot of individual records.

You will find that your micro can manipulate information in the database very easily and very quickly. In no time at all it can search for one particular item and display it for you on the screen. It can also carry out a multiple sort and provide you — in the following example for instance — with a list of all the people in your file who live in Liverpool and whose ages range from 15 to 25.

There are two types of field — numeric and string. The former is used for numbers (such as ages). String fields are used for words. But it should be noted that entries such as telephone numbers are also regarded as strings because they may include characters like spaces and hyphens. The main difference between the two becomes apparent when they are sorted. When treated as a number, *2* comes before *11*. But when it is a string, *11* comes before *2* — just as *aa* comes before *b* in a telephone directory.

To load and run the database program simply type:

LOAD "DBASE"

and press Return.

When loading has been completed, the various options are displayed.

Choose the one you want by pressing the appropriate key as indicated.

Getting started

To set up a file of records we must tell the computer what type of information we wish to keep in each record. As an example we shall set up a file of records to hold the names and addresses of a group of friends. A typical record would be:

SURNAME: **JONES**
FIRST NAME: **SIMON**
ADDRESS1:   **6 BROAD LANE**
ADDRESS2:   **LIVERPOOL**
TELEPHONE: **051-633 8000**
AGE: **42**

At this stage, when you come to set up your own database, you should think carefully about your requirements as the record structure

cannot later be modified.

Each line of information in a record is known as a *field*. In our example, each record has six fields, with the address being split over two fields.

Selecting Option B from the menu will allow you to start setting up the file. The first piece of information that you will need to tell the computer is the number of fields you need for each record. We have decided to have six fields, so in answer to the question: *"How many fields per record?"* key in **6** and press Return.

The next step is to give a name to each of the fields so that from now on we will be able to refer to them by name rather than number. The computer will also need to know whether to treat the information stored in each field as a number or as a string, as well as the maximum number of characters to expect for each field.

For the field title enter **SURNAME.** The computer will then ask for the field type to be entered. Since this field will contain only alphabetic characters and we will not want to perform arithmetic operations on them, enter **S** for string. Finally we need to tell the computer the maximum number of characters to expect for the field. The maximum allowed for any field is 23, so we will enter 23.

Now repeat this for fields 2 to 4, using this

table as a guide:

Field No.	Title	Type	Length
1	**SURNAME:**	**String**	**23**
2	**FIRST NAME:**	**String**	**20**
3	**ADDRESS1:**	**String**	**23**
4	**ADDRESS2:**	**String**	**20**

In field 5 we are going to store the telephone numbers. But although this information is numeric we are going to tell the computer to treat it as a string. If we were to use a numeric field then telephone numbers starting with a zero would lose the leading zero.

5	**TEL:**	**String**	**15**

Finally, enter age as a numeric field. As the maximum age will be 3 digits long, choose a field length of 3 characters.

6	**AGE:**	**Numeric**	**3**

After entering the details for field 6 you will find the screen displays a summary of all the fields. You are then given the opportunity to make changes to any of the details entered. As an example we shall change the title of field 5 to TELEPHONE. Answer **N** to the question: *"Is this correct?"* and then enter **5.** All you need do is to

retype the information for this field and enter TELEPHONE instead of TEL. for the title. Once you are satisfied with the field definitions press **Y** and you will be returned to the menu.

Adding records *(Option C)*

Now that we have set up a file we can start to add records to the database. The number of the record being entered is always displayed at the top of the screen. The title of the field for which the computer is expecting an input is printed on the left. So the first field title to be displayed for our file will be **SURNAME**. To enter the first record type:

```
SURNAME:        JONES
FIRST NAME:     SIMON
ADDRESS1:       6 BROAD LANE
ADDRESS2:       LIVERPOOL
TELEPHONE:      051-633 8000
AGE:            42
```

When you have finished entering the record a list of possible options will appear at the bottom of the screen.

If you wish to modify the record press **A**. Each field is then displayed in turn, along with the prompt: *"Is this correct?"*. If you wish to change your entry for the field then press **N** and

key in the new information. Pressing **Y** will allow you to go on to the next field. If you want to add another record press **N**. Otherwise press **M** to return to the menu.

Loading a file *(Option A)*

A demonstration file has been provided with the program. This will give you an opportunity to experiment with the features outlined below without having to enter your own set of records.

Select the load option by pressing **A**. Loading a new file will erase any records already stored. As a precaution, if a file has already been set up, the computer will ask if you are certain you want to load a new file. Now enter the filename of the file you want to load. You must use a filename, not just press Return. The demonstration file is called DFILE. You must ensure that the tape is in the correct position. *(The file follows the Database program.)*

Once the file has been loaded you can perform various operations on the records by selecting the appropriate option from the menu.

List records *(Option F)*

This option allows you to examine the records that have already been entered. After selecting this option you will be asked if you

want to print out the records. If you do, press **B**. If not, press **A**. You must now tell the computer which records you wish to see. For example, if you would like to look at records 3, 4, 5 and 6 you should enter **3** (Return), followed by **6** (Return). The first record you requested will then be displayed, and at the bottom of the screen you will see a list of the possible options available to you.

Pressing **N** will allow you to move to the next record. If you wish to delete the record displayed on the screen press **D**. Pressing **A** will allow you to alter the record. This operates in the same way as if you had selected Option E from the main menu or when adding records (Option C) and has already been described. To return to the menu press **M**.

Field search *(Option G)*

This option allows you to find any record quickly without having to go through each record in turn. After selecting the option, you must state which field you wish to search through. The options available then depend on whether the field is a string or numeric field.

If you have selected a string field you can search for a specific string.

For a numeric field, you have four options:
A. *Search for a specific value X (i.e., the number you entered).*
B. *Search for values >X (i.e., any numbers greater than the one you entered).*
C. *Search for values <X (i.e., any numbers less than the one you entered).*
D. *Search for a<X<b (i.e., a number between two limits that you enter).*

Replace field *(Option H)*

This powerful option allows you to replace any information stored in a field without having to go through all the records making the amendments yourself. You can replace a number or string. The method of operation is similar to the field search already described, except that the fields are replaced by your new entry, rather than just displayed

Multi-field sort *(Option I)*

You can sort your records into numerical or alphabetical order with this option. It is usual – and quickest – to sort on just one field (such as names), but if you want to take account of other factors you can select other fields. For example, *Smith (age 24)* could be listed before *Smith (age 28)*.

You must select at least one field for the sort. Pressing Return or entering zero for sort fields 2

to 4 will terminate the field selection. You will then be asked if you wish to sort into (A)scending or (D)escending order. Press **A** or **D** and the computer will sort your records. When all the records have been sorted, you may examine them in their new order using Option F.

Field summary *(Option D)*

This option lists the titles of the field, their length and type.

Save current file *(Option J)*

This option allows you to save all the records that you have entered. You should use it frequently so that the chance of losing your work, such as in the event of a power failure or similar mishap, is minimised.

End program *(Option K)*

This option terminates the program. If you have a file in memory you will be asked: *"Do you wish to SAVE the data file?"* If you answer **Y** you will be asked to input your file name and the file will be saved. If you answer **N** your file will be lost.

SPREADSHEET

A SPREADSHEET consists of rows and columns of "boxes" in which you can place numbers, labels or mathematical formulae. Used for home finance, for instance, it is an ideal and easy to use means of keeping tabs on your income and expenditure. Setting up a spreadsheet is quite simple but can be time consuming. However, once it has been prepared to your own specifications, it can be amended quickly and effortlessly.

To illustrate how it is created these instructions show you how to set up an imaginary household budget spreadsheet. You should then have no trouble devising your own for any application you may think of.

To load and run the spreadsheet program simply type:

LOAD "SPREAD"

and press Return.

When the program has loaded you are asked the question: *"Create file?"* Answer **Y**.

Next select 15 columns and 20 rows.

The spreadsheet should now be on the screen. You will find a list of the keys and their uses at the end of this section. You will note that

letters have been chosen logically and this will help you to memorise them.

The first thing to do is to enter a title in the top left hand corner. This is done by pressing **T** and then typing **MONEY,** and then Return. It will be assumed that you will remember to press Return after all future entries, so it will not keep appearing in this text.

Now you need column headings. Ensure that the cursor is under column B, press **C** and enter **JANUARY**. Move the cursor right, using the cursor keys, and repeat the process for the other months. Convert column N to a line by pressing **Y** with the cursor in that column. Note that the prompt: "Are you sure?" appears. This is so that if any formulae had been set in column N they would not be accidentally erased by the unintentional pressing of the Y key. Obviously in this case you answer Yes. The final column – O – should be given the heading **TOTAL**.

The row labels are entered in a similar way. You must use **R** to label rows and **X** to put lines along the rows. Set up the rows like this:

ROW 2. Label **MORTGAGE**
ROW 3: Label **FOOD**
ROW 4: Label **FUEL**
ROW 5: Label **LEISURE**
ROW 6: Label **OTHER**

ROW 7: Convert to a line
ROW 8: Label **TOT OUT**
ROW 9 & 10: Convert to lines
ROW 11: Label **EARNINGS**
ROW 12: Label **B.FWD**
ROW 13: Convert to a line
ROW 14: Label **TOT IN**
ROW 15: Label **TOT OUT**
ROW 16: Convert to a line
ROW 17: Label **REMAINING**
ROW 18: Convert to a line
ROW 19: Label **SAVE**
ROW 20: Label **C.FWD**

Now press **H** to move the cursor to its home position – that is, to display the top left hand corner of the spreadsheet. You can now enter some formulae.

Box B8 will contain the sum of all the boxes above it. The formula for this is:

$$B8 = B2 + B3 + B4 + B5 + B6$$

To enter this, move the cursor to box B8, press **F** and type the rest of the formula after the "B8=" that will appear on the screen. Press Return and after a short delay, the formula will be accepted.

Similar formulae are required along the rest

of row 8. This is achieved by pressing **D** with the cursor still on B8. Then move the cursor right to C8 and press Return. You should see that the formula for C8 is now set. Repeat this procedure for the other columns. This means keep pressing **D**, cursor right and Return in that order.

Remember to copy M8 into O8, not into N8 which is a line.

You can check what functions you have entered at any time by pressing **L**.

Enter the row formulae in a similar way. Move the cursor to box O2, and use **F** to enter the formula:

**O2=B2+C2+D2+E2+F2+G2+H2+
I2+J2+K2+L2+M2**

Use the copy facility again to enter similar formulae in boxes O3, O4, O5, and O6.

Now row 12 needs the formulae inserting. The formulae required are C12=B20, D12=C20, etc. These are entered using **F** with the cursor at the appropriate box. Remember O12=M20. The boxes on row 14 are the sum of the boxes on rows 11 and 12. Use **F** to set up B14 and the copy facility to copy the formula to the other boxes. (B14=B12+B11, C14=C12+C11, etc.)

Row 15 is the same as row 8, so the copy facility can be used to enter formulae such as B15=B8 along the row. Row 17 is row 14 – row 15 and is set up in exactly the same way.

Enter the formulae for total earnings in box O11. That is:

**O11=B11+C11+D11+E11+F11+
G11+H11+I11+J11+K11+L11+M11**

We will assume that 75 per cent of the money remaining is saved and the rest is carried forward to the next month. This leaves two more rows of formulae to set. Set up box B19 with this formula:

B19=B17*0.75

and copy it to the rest of the row. Row 20 will be row 17 – row 19, and is set up as before. If you wish, you can enter formulae for other boxes, such as earnings (for example, C11=B11, etc.) or allow for inflation (such as C5=B5*1.01).

You are now ready to start entering numbers, but it is a good idea to save your work first. Do this by pressing **S** and answering the questions as they appear. To enter numbers, move the cursor to the relevant box, and type the number. Any time you wish to update the spreadsheet, just press **U**.

On the tape (after the graphics program), you will find a sample file called MONEY for you to load. It was set up following these instructions. Load it by first loading the program, or press *Q* if it is already loaded. Answer **N** to the *"Create file?"* question, **MONEY** to the old file name and NO to the extend question. If ever you want to add more rows or columns to an existing file you should answer YES to this question.

Although you have now set up a spreadsheet, there are still some function keys that you have not yet tried. You have already used *L* to display all the formulae on the spreadsheet. If you only want to see a particular one, move the cursor to that box and press *E*. If you want to completely clear a formula, press *W* (again with the cursor on the box). If you wrongly enter a number, pressing *O* will return the previous number.

Z and *Q* are used when you wish to enter a new file. The first only clears the numbers, but leaves labels and formulae intact, while the latter allows you to start a new spreadsheet without reloading the program.

The print option – *P* – allows you to print out the spreadsheet.

As with many user-defined spreadsheets you may need to update several times to ensure that the correct values are in each box.

This is not a bug but an effect created by the method of updating being row by row from the top to the bottom of the spreadsheet in that order. In certain circumstances; for example where formulae like B2=B4 and B4=B3 are entered, the updating of B2 (to equal B4) will take place first. B4 will then be updated to equal B3 but as B2 has already been updated the result will be that B2 does not equal B4! A further update will correct. To check that all required updates have been made keep an eye on the box at the extreme bottom right of your spreadsheet. This is usually, but not always, the last box to change (although it is always the last to be updated).

What the function keys do

C Insert new column label.
D Duplicate (copy) a function (use in conjunction with the Return key – see Pages 25 and 26).
E Examine (display) the formula in the box indicated by the cursor.
F Enter new formula.
H Send cursor home.
L List all formulae on the spreadsheet.
O Return old (last) number.
P Obtain a printout.
Q Quit current file and restart.
R Insert new row label.

S Save the file.
T Insert new title (corner) label.
U Update.
W Wipe (clear) a formula from a box.
X Put a line along a row.
Y Put a line down a column.
Z Zero (clear) all values from the spreadsheet.

This is the original Mini Office from Database Software – the best selling suite of productivity programmes which have introduced over 150,000 computer owners to the world of small business software. A much enhanced, award winning version, Mini Office II, is available for C64, CPC and BBC micro on both cassette and disc, and on disc only for the Atari 8-bit. There are other versions – Mini Office Personal and Mini Office Professional – for PC, PCW and Atari ST.

THE GRAPHICS PROGRAM

THE GRAPHICS program requires you first to set up a file using the spreadsheet. So that you can try out the graphics, a file called MONEY has been included after the graphics program on tape.

To load the graphics program type:

LOAD "GRAPH"

and press Return. When it has loaded and you are asked for the old file name, enter: **MONEY.**

Once this file has loaded you will be asked for the row that you require. If you cannot remember the number, press Return to see a list. To try out the program, enter **4** and press Return. Then answer **Y** to any columns that you want to appear in your graph, and **N** to any that you don't. In this case, answer **Y** to the 12 months, and **N** to the total.

The menu will then appear on the screen. Pressing **1, 2, 3** or **4** will give the display of your choice. When you have it, press **7** to print it out, or any other key to return to the menu.

If you wish to draw graphs from a different area of the spreadsheet, use **5**, and if you want to load a new file use **6**.